

REMARKS

This application has been carefully reviewed in light of the Office Action dated September 28, 2007. Claims 1 to 5, 7, 12 to 18 and 22 are in the application with Claims 6, 8, 9, 10, 11 and 20 having been cancelled. Claims 1, 18 and 22 are the independent claims. Reconsideration and further examination are respectfully requested.

Claims 1 to 16, 18, 20 and 22 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,182,069 (Niblack) in view of U.S. Publication No. 2002/0025084 (Yang), and Claim 17 was rejected under 35 U.S.C. § 103(a) over Niblack in view of Yang and further in view of U.S. Patent No. 6,356,908 (Brown). Reconsideration and withdrawal of the rejections are respectfully requested.

The present invention generally concerns an image search apparatus which searches for an image. A plurality of images and partial images included in the respective images are stored. A feature of a search target image is received as a search condition, and an image including a partial image which contains the feature is searched for as a candidate image.

In one aspect of the invention, the candidate image which corresponds to the search condition is displayed while the partial image included in the candidate image is emphasized.

For example, in one sample embodiment shown at Figure 21, a candidate image which corresponds to the search condition is displayed while the contour of a partial image included in the candidate image is edged with thick lines. Alternatively, in the same sample embodiment shown at Figure 21, the candidate image is displayed while the contour of the partial image is edged with dotted lines.

By virtue of this arrangement, it is ordinarily possible for a user to more easily locate a desired image in the display search results, even if several results are displayed.

Referring specifically to the claim language, independent Claim 1 is directed to an image search apparatus. The apparatus includes image storage means for storing a plurality of images, region information storage means for storing partial images included in the respective images stored in the image storage means in correspondence with the respective images, and region feature storage means for storing features of the partial images stored in the region information storage means in correspondence with the partial images. The apparatus further includes receiving means for receiving a feature of a search target image as a search condition to search for an image. Additionally, the apparatus includes search means for searching for an image including a partial image which contains the feature received by the receiving means as a candidate image. The apparatus also includes search result display means for displaying the candidate image which corresponds to the search condition, while emphasizing the partial image included in the candidate image.

Independent Claims 18 and 22 are respectively directed to a method and a computer readable recording medium which are seen to generally correspond with Claim 1.

The applied art is not seen to disclose or suggest the features of the present invention, and in particular is not seen to disclose or suggest at least the feature of displaying a candidate image including a partial image which corresponds to a search condition, while emphasizing the partial image.

As understood by Applicants, Niblack is directed to searching for video images in a database by determining whether a representative frame stored in the database

has at least one object and background similar to that of at least one object and background of a search image. See Niblack, Abstract.

With particular regard to display of search results, Niblack discloses that query results are included in a Query Result window 200 which includes at least three columns. The first column (LT_THUMB) includes a thumbnail for a complete image. The second column (LT_MASK) shows a selected sub-area of the image with one or more mask outlines. The third column 202 illustrates graphically the composite distance of an image from the input query. See Niblack, column 10, lines 17 to 25. However, Niblack is not seen to disclose or suggest displaying a candidate image including a partial image which corresponds to a search condition, while emphasizing the partial image.

Yang is not seen to remedy the deficiencies of Niblack. As understood by applicants, Yang is directed to an enlarged digital image providing method in which a client designates a specific domain of a display image for enlarged display, and a server transmits a segmental image document necessary for constructing the requested enlarged domain. See Yang, Abstract.

Pages 3 and 4 of the Office Action assert that Yang (Figures 1 to 3, paragraphs [0005], [0047], [0048], [0053], [0054], and [0065]) discloses displaying a reduced image of a candidate image upon enlarging a partial image included in the candidate image.

However, the cited portions of Yang describe that an original image is reduced in size by reducing the number of image pixels. See Yang, paragraphs [0005], [0047], and Figure 2. The original image is also segmented into a plurality of segmented image documents, and when a client designates a specific region of the reduced image to

request an enlarged display image, the server transmits segmental images necessary for displaying the designated region. See Yang, paragraphs [0048], [0053], and Figure 2. This process can be repeated. See Yang, paragraph [0054] and Figure 2.

As such, the displayed image in Yang is simply an enlarged designated portion of the reduced original image. In contrast, in the present invention, the candidate image corresponds to a search condition, and a partial image of the candidate image corresponding to the search condition is emphasized.

Accordingly, the applied art is not seen to disclose or suggest displaying a candidate image including a partial image which corresponds to a search condition, while emphasizing the partial image.

Therefore, independent Claims 1, 18, and 22 are believed to be in condition for allowance, and such action is respectfully requested.

The other claims in the application are each dependent from the independent claims discussed above and are therefore believe to be allowable over the applied references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

Applicant's undersigned attorney may be reached in our Costa Mesa,
California office at (714) 540-8700. All correspondence should continue to be directed to
our below-listed address.

Respectfully submitted,



Michael J. Guzniczak
Attorney for Applicant
Registration No.: 59,820

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3800
Facsimile: (212) 218-2200

FCHS_WS 1891295v1